20051121.ba v03_n864.bam.20051121

>From ???@??? Mon Nov 21 12:27:47 2005 -0600
Date: Mon, 21 Nov 2005 18:26:58 GMT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3864
Message-Id: <20051121182700.285E84088B@srvr1.theporch.com>

BOATANCHORS Digest 3864

Topics covered in this issue include:

1) UPS Rate Increase
by David Stinson <arc5@ix.netcom.com>
2) Re: R-S speaker zip-cord @ RF
by "Tom Rauch" <w8ji@contesting.com>
3) Measurements Corporation 58AS
by Brian K Harris <brian.k.harris@philips.com>
4) Need a favour
by Morris Odell <morriso@vifm.org>
5) Re: R-S speaker zip-cord @ RF
by "Arden Allen" <gumbear@pacbell.net>
6) Viking Desk KW Shipping Question
by "James C. Garland" <4cx250b@muohio.edu>
7) Re: R-S speaker zip-cord @ RF
by W7QHO@aol.com
8) Re: R-S speaker zip-cord @ RF
by "Tom Rauch" <w8ji@contesting.com>
9) Re: R-S speaker zip-cord @ RF
by "Arden Allen" <gumbear@pacbell.net>
10) Re: R-S speaker zip-cord @ RF
by "Arden Allen" <gumbear@pacbell.net>
11) Re: R-S speaker zip-cord @ RF
by W7QHO@aol.com
12) Re: R-S speaker zip-cord @ RF
by "Tom Rauch" <w8ji@contesting.com>
13) Re: R-S speaker zip-cord @ RF
by Scott Robinson <spr@earthlink.net>
14) Re: R-S speaker zip-cord @ RF
by "Don Davis" <dxguy@earthlink.net>
15) Re: R-S speaker zip-cord @ RF
by "Tom Rauch" <w8ji@contesting.com>
16) Elmac ATR-4 transceiver
by "James C. Garland" <4cx250b@muohio.edu>
17) Re: R-S speaker zip-cord @ RF
by "Arden Allen" <gumbear@pacbell.net>
18) Re: R-S speaker zip-cord @ RF

by "Tom Rauch" <w8ji@contesting.com>
19) HRO PW dial & cap for sale
by Bob Roehrig <broehrig@aurora.edu>
20) Re: Viking Desk KW Shipping Question
by Richard Loken <richardlo@admin.athabascau.ca>
21) free panel meter
by Brian K Harris <brian.k.harris@philips.com>

Date: Fri, 18 Nov 2005 20:01:33 -0600
From: David Stinson <arc5@ix.netcom.com>
Subject: UPS Rate Increase
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <437E877D.7060200@ix.netcom.com>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1; format=flowed
Content-transfer-encoding: 8BIT

...Since you are a UPS customer, we want to give you advance notice of new UPS rates that will take effect January 2, 2006. You can click here by December 12, 2005 to request a reminder e-mail when the new rates go into effect and the 2006 UPS Rate and Service Guide is available on ups.comÆ.

UPS published On-Demand Rates* will change as follows: Commercial Ground will increase 3.9%, and UPS Air and International Services will increase 5.5%....Adjustments will be made to accessorial charges in 2006. The residential surcharge for UPS Ground will increase by $0.25. The residential surcharge for UPS Air Services and UPS 3 Day SelectSM will increase by $0.35. The Additional Handling charge and the charge for Collect on Delivery (C.O.D.) service will increase by $1 per package. UPS Delivery Confirmation and Signature Required services will increase by $0.25 per package, and Adult Signature Required service will increase by $0.50.

On December 1, 2005, you may view all On-Demand Rates and accessorial charges for 2006 at ondemandrates.ups.com. Updated service and rate information, as well as a downloadable copy of the 2006 UPS Rate and Service Guide, will be available on ups.com on January 2, 2006.
Thank you for the business you entrust to UPS....

Message-ID: <000d01c5edd6$c860d2a0$6401a8c0@akorn.net>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <boatanchors@theporch.com>
Subject: Re: R-S speaker zip-cord @ RF
Date: Sun, 20 Nov 2005 08:31:58 -0500

MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> Did I miss something?

Maybe..

> How do you get from a measure of impedance, at just two
frequencies,
> to a declaration of zero dielectric loss - and for all the
frequencies in
> between?

As I recall he said he swept the line and saw very low SWR (constant input Z) over a wide range. That means the line was correctly terminated.

If the line had high dielctric loss compared to conduction loss, it should have shown up as inductive reactance on the input Z, assuming the test gear could measure it. Phase angle of all that distributed C wouldn't balance out phase angle of all that distributed L. Doesn't mean the line was low loss, just well proportioned.

> Good physics? Really?

Maybe. Unless I missed something in all of this. Maybe not good test gear, however.

> And, as a matter of interest, balanced line generally has
less unmatched
> loss than coaxial cable and much, much less unbalanced
radiation -
> independent of the impedance.

Now that I'm not so sure of Brian. Doesn't sound right to me unless you add a lot of qualifiers.

In lines at HF or below upper VHF, conductor loss generally dominates the system. So for short lengths lowest loss is with some SWR in the direction where distributed current is reduced. Conductor resistance is very important. Have to be careful saying balanced wire always has lower loss with high SWR. Not always true.

Don't know what you mean about unbalanced radiation. I can't think of a case where common mode current is the same and one type radiates less than the other. Balanced line always has some radiation even when perfectly balanced (coaxial can be ignored as long as it doesn't have common mode excitation and the shield is several skins thick and has reasonable integrity) although a fractional wavelength spaced twist will cancel most farfield effects in balanced lines.

What are you trying to say Brian??

73 Tom

To: Old Tube Radios <boatanchors@theporch.com>
Subject: Measurements Corporation 58AS
MIME-Version: 1.0
Message-ID: <OF42ABA31D.1DC2F966-ON882570BF.0072BAD7-862570BF.0073D9E9@philips.com>
From: Brian K Harris <brian.k.harris@philips.com>
Date: Sun, 20 Nov 2005 15:03:48 -0600
Content-Type: text/plain; charset="US-ASCII"

Awhile ago I tried half-heartedly tried to sell my Measurements Corporation Model 58AS V.H.F. Radio Noise Generator and Field Strength Meter (Serial #833), which covers 15 to 150 Mc in five bands. Unfortunately or perhaps fortunately, it didn't sell. After looking at it a little closer I have decided to at least tentatively keep it and see what I can do with it. By the way, this thing is built like a tank and it's beautiful inside and out. It's so clean inside that I would bet money I am the first person to see inside the thing since it left the factory. That said, it's too bad I don't have a clue how to use it. It's missing it's antenna, a thing which connects via an XLR connector with one pin grounded and the other two for a balanced antenna. So, this is my meager request for any information that might shed some light on how to use it. Suffice it to say, I am looking for a manual but fat chance of finding one. A google search only yielded my recent post to sell it.

Thanks for your time.

73

Brian K. Harris, Account Manager, South Central Region

Philips Semiconductors
2140 Lake Park Boulevard, Suite 200
Richardson, Texas 75080 USA

Mobile: 214-763-5977 (preferred)

Office: 972 705-2484
Fax: 972-705-2450
Email: brian.k.harris@philips.com

Date: Mon, 21 Nov 2005 08:38:18 +1100
From: Morris Odell <morriso@vifm.org>
Subject: Need a favour
To: Old Tube Radios <boatanchors@theporch.com>
MIME-version: 1.0
Content-type: multipart/mixed; boundary="Boundary_(ID_jOpJ0/Az1DhYVbx4O+U1MA)"
content-class: urn:content-classes:message

This is a multi-part message in MIME format...

--Boundary_(ID_jOpJ0/Az1DhYVbx4O+U1MA)
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7BIT
Content-disposition: inline
content-class: urn:content-classes:message

Hi all,

I need a favour from one of my friends in the USA. I'm working on a project that needs a couple of a particular chip. It's about US$3 in the Mouser catalog and the equivalent of AU$8 from the only local supplier I can find.

I would be very grateful if someone who is already buying somewthing from Mouser (or equiv) could piggy back an order for 4 of these chips for me and airmail them down here. All costs covered, preferably by Pay Pal.

Even with the cost of Pay Pal, it's cheaper than dealing with the locals. This is unfortunately what we have come to down here.

Thanks,

Morris Odell VK3DOC
Melbourne, Australia

* * * CONFIDENTIAL * * *
The information in this message and in any attachments may be confidential. If you are not the intended recipient of this message, you must not read, forward, disclose, or use in any way the information this message or any attachment contains. If you are not the intended recipient, please notify the sender immediately and delete

or destroy all copies of this message and any attachments.

--Boundary_(ID_jOpJ0/Az1DhYVbx4O+U1MA)--
--Boundary_(ID_jOpJ0/Az1DhYVbx4O+U1MA)--
--Boundary_(ID_jOpJ0/Az1DhYVbx4O+U1MA)--
--Boundary_(ID_jOpJ0/Az1DhYVbx4O+U1MA)--

Message-ID: <001801c5ee1d$562c4010$5ee47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <boatanchors@theporch.com>
Subject: Re: R-S speaker zip-cord @ RF
Date: Sun, 20 Nov 2005 13:48:42 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> > But what good's 110 ohm balanced transmission line?

This is what I call the *garden hose* school of transmission line theory.
It says the water you put in always comes out the other end. None of the
water is returned to the faucet and none leaks away invisibly causing only a
trickle to come out of the spray nozzel. Nonsense!

So my question for the ex-spurts is, using a lossless line of Zo = 100 ohms,
what is the power loss in DB at 4 MHz for various quarter, half, and whole
plus fractional wavelengths deliverd to a resistive 50 ohm load?

If nobody can figure the answers I'll go to work on it and report back.....
someday.

Arden Allen
KB6NAX

Message-Id: <6.2.3.4.2.20051120184852.01cf60c8@po.muohio.edu>
Date: Sun, 20 Nov 2005 18:52:59 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "James C. Garland" <4cx250b@muohio.edu>
Subject: Viking Desk KW Shipping Question
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hi Gang,
Does anybody remember how the EFJ Desk KW was shipped? Were the
XFMRs removed, was it crated, or what? How many packages? Of

course, when it was new most of us were mowing lawns and couldn't
even dream of affording one, but maybe there's a REAL old-timer on
the List, who happened also to be rich in 1955.
73,
Jim Garland W8ZR

****
W8ZR Amateur Radio Website: www.w8zr.net
****

From: W7QHO@aol.com
Message-ID: <86.33f87499.30b26bd0@aol.com>
Date: Sun, 20 Nov 2005 19:16:16 EST
Subject: Re: R-S speaker zip-cord @ RF
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="part1_86.33f87499.30b26bd0_boundary"

--part1_86.33f87499.30b26bd0_boundary
Content-Type: text/plain; charset="ISO-8859-1"
Content-Transfer-Encoding: quoted-printable

In a message dated 11/20/05 1:59:40 PM, gumbear@pacbell.net writes:

> So my question for the ex-spurts is, using a lossless line of Zo =3D 100=20
> ohms,
> what is the power loss in DB at 4 MHz for various quarter, half, and=A0 wh=
ole
> plus fractional wavelengths deliverd to a resistive 50 ohm load?
>=20
>=20

Presume you mean perfectly balanced too and floating out in free space=20
somewhere.   If so, the answer is zero DB for any length at any frequency wi=
th any=20
terminating impedance.

Dennis D. W7QHO
Glendale, CA

--part1_86.33f87499.30b26bd0_boundary
Content-Type: text/plain; charset=us-ascii

```
Content-Transfer-Encoding: 7bit

* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*         ---REMAINDER OF MESSAGE TRUNCATED---          *
*     This post contains a forbidden message format      *
*  (such as an attached file, a v-card, HTML formatting)  *
*    Mail Lists at theporch.com only accept PLAIN TEXT    *
* If your postings display this message your mail program *
* is not set to send PLAIN TEXT ONLY and needs adjusting  *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

--part1_86.33f87499.30b26bd0_boundary--

------------------------------
Message-ID: <000a01c5ee33$f35c9180$6401a8c0@akorn.net>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <boatanchors@theporch.com>
Subject: Re: R-S speaker zip-cord @ RF
Date: Sun, 20 Nov 2005 19:38:53 -0500
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
```

> So my question for the ex-spurts is, using a lossless line
of Zo = 100 ohms,
> what is the power loss in DB at 4 MHz for various quarter,
half, and whole
> plus fractional wavelengths deliverd to a resistive 50 ohm
load?

I agree with 7QHO. The power loss is zero dB.

```
------------------------------
Message-ID: <002301c5ee3d$50009b80$7ee47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: R-S speaker zip-cord @ RF
Date: Sun, 20 Nov 2005 17:45:47 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit
```

> Presume you mean perfectly balanced too and floating out in free space
somewhere.   If so, the answer is zero DB for any length at any frequency

with any
terminating impedance.

Even if unbalanced, and not in free space, you are correct. The loss in a
lossless transmission line is zero, regardless. So, the next question is,
now that we have established that transmission line impedance is not a
contributor to loss, what contributes to *real* loss? By "real" I mean
signal energy turned into heat?

Arden Allen
KB6NAX

Message-ID: <003b01c5ee3e$4afd1450$7ee47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: R-S speaker zip-cord @ RF
Date: Sun, 20 Nov 2005 17:52:51 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> By "real" I mean signal energy turned into heat (replace ? with .).

From: W7QHO@aol.com
Message-ID: <266.1ff31a.30b294a6@aol.com>
Date: Sun, 20 Nov 2005 22:10:30 EST
Subject: Re: R-S speaker zip-cord @ RF
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: multipart/alternative; boundary="part1_266.1ff31a.30b294a6_boundary"

--part1_266.1ff31a.30b294a6_boundary
Content-Type: text/plain; charset="ISO-8859-1"
Content-Transfer-Encoding: quoted-printable

In a message dated 11/20/05 5:48:50 PM, gumbear@pacbell.net writes:

> So, the next question is,
> now that we have established that transmission line impedance is not a
> contributor to loss, what contributes to *real* loss?=A0 By "real" I mean
> signal energy turned into heat?
>=20

I squared R losses in the conductors and dielectric losses, the latter=20
primarily due to leakage currents in the insulating material.   In practice=20=
there=20
can also be energy losses due to coupling into other circuits either by=20
radiation or magnetic induction.

Dennis D. W7QHO
Glendale, CA

--part1_266.1ff31a.30b294a6_boundary
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
*         ---REMAINDER OF MESSAGE TRUNCATED---             *
*     This post contains a forbidden message format        *
*  (such as an attached file, a v-card, HTML formatting)   *
*    Mail Lists at theporch.com only accept PLAIN TEXT     *
* If your postings display this message your mail program  *
* is not set to send PLAIN TEXT ONLY and needs adjusting   *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

--part1_266.1ff31a.30b294a6_boundary--

Message-ID: <002401c5ee49$e8ab7060$6401a8c0@akorn.net>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: R-S speaker zip-cord @ RF
Date: Sun, 20 Nov 2005 22:16:04 -0500
MIME-Version: 1.0
Content-Type: text/plain;
    charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

primarily due to leakage currents in the insulating
material.   In practice there
can also be energy losses due to coupling into other
circuits either by
radiation or magnetic induction.>>

...and external electric field coupling losses....

Mime-Version: 1.0
Message-Id: <p06230903bfa6ed7892ac@[192.168.1.2]>
Date: Sun, 20 Nov 2005 19:20:38 -0800

To: Old Tube Radios <boatanchors@theporch.com>
From: Scott Robinson <spr@earthlink.net>
Subject: Re: R-S speaker zip-cord @ RF
Content-Type: text/plain; charset="us-ascii" ; format="flowed"

Folks,

Bear in mind this simple bit of physics: the energy delivered to the transmission does one of four things:

Is delivered to the load;

Is reflected back and absorbed by the driver's output impedance;

Is radiated into free space (not much for a balanced floating line);

Is dissipated in losses-series resistance or dielectric losses-in the transmission line.

I expect the intended question is this: if the source and load both match the line impedance, how much is lost to heat due to resistance or dielectric absorption as a function of frequency? The answer may largely depend on the type of plastic used as insulation, usually PVC.

Peace,

Scott Robinson

> > > But what good's 110 ohm balanced transmission line?
>
>This is what I call the *garden hose* school of transmission line theory.
>It says the water you put in always comes out the other end. None of the
>water is returned to the faucet and none leaks away invisibly causing only a
>trickle to come out of the spray nozzel. Nonsense!
>
>So my question for the ex-spurts is, using a lossless line of Zo = 100 ohms,
>what is the power loss in DB at 4 MHz for various quarter, half, and whole
>plus fractional wavelengths deliverd to a resistive 50 ohm load?
>
>If nobody can figure the answers I'll go to work on it and report back.....
>someday.
>
>Arden Allen
>KB6NAX

Message-ID: <002801c5ee5b$33c04380$acc6e804@hppav>
From: "Don Davis" <dxguy@earthlink.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <w2cqh@asti.net>
Subject: Re: R-S speaker zip-cord @ RF
Date: Sun, 20 Nov 2005 21:19:34 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well.... the R390 balanced input connector is about 100 Ohms (common IBM computer IF cable), and the input itself of the R390 measures in this range on the lower bands (per Dallas Lankford).

73 de Don AD6PB

----- Original Message -----
From: "stuck in 50s" <polepeeg@ba-watch.org>

Subject: R-S speaker zip-cord @ RF

>
> But what good's 110 ohm balanced transmission line?
>
> 'rm

Message-ID: <000501c5ee8a$9156a780$6401a8c0@akorn.net>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: <w2cqh@asti.net>
Subject: Re: R-S speaker zip-cord @ RF
Date: Mon, 21 Nov 2005 05:58:50 -0500
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> Well.... the R390 balanced input connector is about 100
Ohms (common IBM
> computer IF cable), and the input itself of the R390
measures in this range
> on the lower bands (per Dallas Lankford).

And when receiving, the receiver is the load and antenna the source so the RX input Z compared to transmission line Z sets the SWR of the receiving system. The antenna to line mismatch doesn't set line SWR when receiving, only the source mismatch.

Message-Id: <6.2.3.4.2.20051121065045.01d5f448@po.muohio.edu>
Date: Mon, 21 Nov 2005 06:53:46 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "James C. Garland" <4cx250b@muohio.edu>
Subject: Elmac ATR-4 transceiver
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Gang,
FYI, here's an interesting email I received from Ralph, W8ROI, on an unusual transceiver I'd not known about.
Jim Garland
W8ZR

>Jim
>
>If you want what may actually be THE RAREST of the ham transceivers, be on the lookout for an ELMAC ATR-4. There were only 13 produced, and one more that did not get past the receiver portion. It was owned by Bill, W8OCT/K8JG-K8GJ??, who was on the sales staff at ELMAC. All of the radios were hand built by W8GBT, Bob Leland, (SK) the main designer, and W8ERN, Angelo, another designer/engineer at ELMAC. Many of the i.f. and oscillator cans were bought from ordinary sources and rebuilt by adding or pulling turns, to match the impedances of the circuits.
>
>The ATR-4 was based on the "SSB Penetrator", the Master's Thesis project of Bob, W8GBT. He used his ham radio project, with the permission of his instructors, as his thesis for his MSEE degree, at Wayne State University, in Detroit.
>
>It was a 'dream radio' that could have never been mass produced at a profit. I have one of the copies of the book that he had to have published to meet the requirements of the degree.
>Leading up to the 'finished product', Bob also built a separate receiver and transmitter, using the same design techniques and many of the same mixing schemes that ended up in the SSB Penetrator. No one seems to know where the receiver is. I got the transmitter at the same time I got the ATR-4, and disposed of it at the same time. (Still kicking myself!!!)

>I foolishly let it go about 15 years back.
>
>George Goldstone, W8AP, was keeping a list of known ATR-4 owners, much
>the same as your FPM-200 list, but I don't know if he has kept the list
>up in recent years.
>
>I don't know if a radio collection can ever be 'complete', but none will
>ever be complete without an ATR-4! I realize that the radio never was
>mass produced, but, it is still out there, and it was a pretty good
>radio. ELMAC could not get the production costs low enough to market it
>in competition with Collins and Drake. I think that the MSRP back in the
>early 1960s was around $995, with matching power supply. The radios that
>were produced were loaned out to a select group of hams, and to several
>radio clubs for Field Days, and they always got great feedback from the
>'field testers'.
>
>The Motor City Radio Club, (W8MRM) was one club that had the use of one
>of the radios at Field Days. Bill McNeil, W8OCT was a member there, and
>made the arrangements.
>
>I knew Bob, W8GBT, and I just wish that more people knew of his ingenuity
>and work.
>Just thought I would bring the ATR-4 to your attention.
>
>Thanks for a great website, and lots of memories.
>
>73,
>
>Ralph - W8ROI

Message-ID: <003601c5eea1$fb6dce70$96e47443@KB6NAX>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: R-S speaker zip-cord @ RF
Date: Mon, 21 Nov 2005 05:46:21 -0800
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> Copper loss and dielectric loss.

OK, Brian, you said all that needed to be said.

So what we are left with is an imperfect load with a mismatched line and
antenna. That is where our boatanchorish antenna impedance matching
networks come in. We make the antenna appear to be resistive to the final

amplifier if the load appears reactive so that all available power is delivered to the antenna system. The only energy that is not absorbed by the antenna system radiation resistance ("radiated") is that which is lost by conductor IsqR and dielectric "exercising" losses. In a "balanced" transmission line, i.e., we have a transmission line that has minimal current flowing on its shield, or in the case of twin lead, the magnetic fields are mutually cancelled by the equal currents in the adjacent conductors.

So the only thing left for Marty to consider is how much power his zip cord will handle before the 60 degree C PVC insulation melting point is achieved. As he goes up in frequency the maximum power allowable will decrease as dielectric loss increases. He would be better off using 300 ohm TV twinlead if he's going to run any power. The dielectric loss will be much less at 30 MHz. If his antenna matcher will not accomodate divergent impedances then he will have to adjust the length of his transmission line. In all likelyhood a 300 ohm twinlead feed will be more efficient than 50 ohm coax. Lamp cord will work just fine at modest power levels, but you may not want to use it to hear moon dust crackle using a liquid nitrogen cooled preamp :-)

Arden Allen
KB6NAX

Message-ID: <001b01c5eea7$6879f7a0$6401a8c0@akorn.net>
From: "Tom Rauch" <w8ji@contesting.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: R-S speaker zip-cord @ RF
Date: Mon, 21 Nov 2005 09:25:22 -0500
MIME-Version: 1.0
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

> he will have to adjust the length of his transmission
line. In all
> likelyhood a 300 ohm twinlead feed will be more efficient
than 50 ohm coax.
> Lamp cord will work just fine at modest power levels, but
you may not want
> to use it to hear moon dust crackle using a liquid
nitrogen cooled preamp

I don't know how we can make blanket statements like that. Many zip cords have terrible loss at HF. They indeed may convey usable power to the load if the criteria is only making a contact over good paths, but when a signal is near

noise or QRM levels even a dB or two can make a big
difference in copy.

300 ohm receiving twinlead might not be better than 50 ohm
line for loss. It has pretty small diameter copper. What if
I use matched RG-8 and replace it with 300ohm TV antenna
lead? Not likely to make things better.

General statements are trouble.

73 Tom

Date: Mon, 21 Nov 2005 09:34:34 -0600 (CST)
From: Bob Roehrig <broehrig@aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: HRO PW dial & cap for sale
Message-ID: <Pine.LNX.4.61.0511210931260.22445@hermes.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII; format=flowed

Anyone restoring a HRO or building a clone? I have a nice PW dial,
dualshaft right angle drive and 4 section cap as used in the HRO
receivers. The dial is gray and has a few chips at the edges - otherwise
everything is in good shape. $45.00 include shipping in U.S.

Bob Roehrig
Aurora University   Telecom dept.
broehrig@aurora.edu
K9EUI W9ZGP WC2XSR/11 WD2XSH/19
630-844-4898   fax 630-844-4222
"Nostalgia is a thing of the past"

Date: Mon, 21 Nov 2005 10:16:47 -0700 (MST)
From: Richard Loken <richardlo@admin.athabascau.ca>
Subject: Re: Viking Desk KW Shipping Question
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id: <Pine.PMDF.3.95.1051121100616.541358784C-100000@admin.athabascau.ca>
MIME-version: 1.0
Content-type: TEXT/PLAIN; charset=US-ASCII

On Sun, 20 Nov 2005, James C. Garland wrote:

> course, when it was new most of us were mowing lawns and couldn't

> even dream of affording one, but maybe there's a REAL old-timer on
> the List, who happened also to be rich in 1955.

Mowing lawns? My mum was relieved that I was finally toilet trained so she could shift her attention to my newly born sister.

```
--
   Richard Loken VE6BSV, Systems Programmer - VMS  : "Anybody can be a father
   Athabasca University                            :  but you have to earn
   Athabasca, Alberta Canada                       :  the title of 'daddy'"
   ** richardlo@admin.athabascau.ca **             :  - Lynn Johnston
```

To: Old Tube Radios <boatanchors@theporch.com>
Subject: free panel meter
MIME-Version: 1.0
Message-ID: <OF668E5E35.C343C538-
ON882570C0.006305AA-862570C0.00655513@philips.com>
From: Brian K Harris <brian.k.harris@philips.com>
Date: Mon, 21 Nov 2005 12:25:13 -0600
Content-Type: text/plain; charset="US-ASCII"

I give, I give!

While going through my hundreds of panel meters I ran across one that has me stumped. I'll ship it free to the first person that wants/needs it and can explain how to apply it. Here goes.....

It was made for Cal-Van Tools. It has a plastic face/cover (like many cheap meters) and rests at center scale. It's marked Alternator-Generator Current Indicator. The scale is 75 Amps, both left and right. There is no easily determined way how one would mount this meter as there are no tabs, bolts, holes, etc. Now get this, the meter housing is aluminum and there are no connections on the back. Riveted to the housing is another piece of aluminum that is sort of a U-channel with a lip on one side. To help you visualize this, if there were another lip on the other side of the channel, you could wind several turns of wire or small rope around, as if you were going to store it, like a vacuum cleaner cord. Looking at the end, the channel looks like this....

```
X        XXXX
X        X
XXXXX
```

The only thing I can figure is this meter is either a demo dummy or else you wind some wire around the aluminum channel or just pass the wire through the channel and inductively couple energy into the meter. That said, regardless of how it works (or doesn't), I don't need it.

First believable explanation and request wins.

Brian K. Harris, Account Manager, South Central Region

Philips Semiconductors
2140 Lake Park Boulevard, Suite 200
Richardson, Texas 75080 USA

Mobile: 214-763-5977 (preferred)
Office: 972 705-2484
Fax: 972-705-2450
Email: brian.k.harris@philips.com

End of BOATANCHORS Digest 3864
****